

Reproduction and survival of Akiapolaau, Hawaii Akepa, Hawaii Creeper, and Other Native Forest Birds Along a Gradient of Native Bird Density in Wet Forests of Windward Hawaii

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The Akiapolaau (*Hemignathus virens*) is one of three endangered forest birds in Hakalau Forest NWR.



Photo by Jack Jeffrey.

Objectives:

- ☆ Determine limiting factors responsible for gradient in forest bird densities in largest wet forest refuge on Hawaii
- ☆ Document life history traits of 3 endangered species native to high-elevation rainforests on Hawaii

Accomplishments:

- ☆ Evaluated 6 hypotheses for a gradient in forest bird densities (disease, predation, vegetation, cavities, food, and feral pigs)
- ☆ Documented survival rates, nesting success, dispersal, and population growth rates for 7 species of natives

Significance:

- ☆ First ecological study of wet-forest bird community as a whole
- ☆ Provided managers with information on limiting factors of native birds within refuge
- ☆ Identified liwi (*Vestiaria coccinea*) as a species of concern based on demographic modeling

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